Alignment of SEQ ID NO:43 and SEQ ID NO:2

```
SeqID:43   (    1)  taccgaagagctacccgacgagttcgtggtggtgacggcaaaatgaaagagctcagcccc
seqID:2    (    1)  ------------------------------------------------------------


SeqID:43   (   61)  agatggtacttctattacctaggaactggcccagaagcttcacttccctacggcgctaac
seqID:2    (    1)  ------------------------------------------------------------


SeqID:43   (  121)  aaagaaggcatcgtatgggttgcaactgagggagccttgaatacacccaaagaccacatt
seqID:2    (    1)  ------------------------------------------------------------


SeqID:43   (  181)  ggcacccgcaatcctaataacaatgctgccaccgtgctacaacttcctcaaggaacaaca
seqID:2    (    1)  ------------------------------------------------------------


SeqID:43   (  241)  ttgccaaaaggcttctacgcagagggaagcagaggcggcagtcaagcctcttctcgctcc
seqID:2    (    1)  ------------------------------------------------------------


SeqID:43   (  301)  tcatcacgtagtcgcggtaattcaagaaattcaactcctggcagcagtaggggaaattct
seqID:2    (    1)  ------------------------------------------------------------


SeqID:43   (  361)  cctgctcgaatggctagcggaggtggtgaaactgccctcgcgctattgctgctagacaga
seqID:2    (    1)  ------------------------------------------------------------


SeqID:43   (  421)  ttgaaccagcttgagagcaaagtttctggtaaaggccaacaacaacaaggccaaactgtc
seqID:2    (    1)  ------------------------------------------------------------


SeqID:43   (  481)  actaagaaatctgctgctgaggcatctaaaaagcctcgccaaaaacgtactgccacaaaa
seqID:2    (    1)  ------------------------------------------------------------


SeqID:43   (  541)  cagtacaacgtcactcaagcatttgggagacgtggtccagaacaaacccaaggaaatttc
seqID:2    (    1)  ------------------------------------------------------------


SeqID:43   (  601)  ggggaccaagacctaatcagacaaggaactgattacaaacattggccgcaaattgcacaa
seqID:2    (    1)  ------------------------------------------------------------
```

```
SeqID:43   (   661)  tttgctccaagtgcctctgcattctttggaatgtcacgcattggcatggaagtcacacct
seqID:2    (     1)  ------------------------------------------------------------


SeqID:43   (   721)  tcgggaacatggctgacttatcatggagccattaaattggatgacaaagatccacaattc
seqID:2    (     1)  ------------------------------------------------------------


SeqID:43   (   781)  aaagacaacgtcatactgctgaacaagcacattgacgcatacaaaacattcccaccaaca
seqID:2    (     1)  ------------------------------------------------------------


SeqID:43   (   841)  gagcctaaaaaggacaaaaagaaaaagactgatgaagctcagcctttgccgcagagacaa
seqID:2    (     1)  ------------------------------------------------------------


SeqID:43   (   901)  aagaagcagcccactgtgactcttcttcctgcggctgacatggatgatttctccagacaa
seqID:2    (     1)  ------------------------------------------------------------


                                                                             +++
SeqID:43   (   961)  cttcaaaattccatgagtggagcttctgctgattcaactcaggcataaacactcatgATG
seqID:2    (     1)  ----------------------------------------------------------ATG


                     +++++++++++++++++++
SeqID:43   (  1021)  ACCACACAAGGCAGATGGgctatgtaaacgttttcgcaattccgtttacgatacatagtc
seqID:2    (     4)  ACCACACAAGGCAGATGG-------------------------------------------


SeqID:43   (  1081)  tactcttgtgcagaatgaattctcgtaactaaacagcacaagtaggtttagttaacttta
seqID:2    (    22)  ------------------------------------------------------------


SeqID:43   (  1141)  atctcacatagcaatctttaatcaatgtgtaacattagggaggacttgaaagagccacca
seqID:2    (    22)  ------------------------------------------------------------


SeqID:43   (  1201)  cattttcatcgaggccacgcggagtacgatcgagggtacagtgaataatgctagggagag
seqID:2    (    22)  ------------------------------------------------------------


SeqID:43   (  1261)  ctgcctatatggaagagccctaatgtgtaaaattaattttagtagtgctatccccatgtg
seqID:2    (    22)  ------------------------------------------------------------


SeqID:43   (  1321)  attttaatagcttcttaggagaatgac
seqID:2    (    22)  ---------------------------
```

Alignment of SEQ ID NO:43 and SEQ ID NO:4

SeqID:43   (1) taccgaagagctacccgacgagttcgtggtggtgacggcaaaatgaaagagctcagcccc
seqID:4   (1) --

SeqID:43   (61) agatggtacttctattacctaggaactggcccagaagcttacttccctacggcgctaac
seqID:4   (1) --

SeqID:43   (121) aaagaaggcatcgtatggggttgcaactgagggagccttgaatacacccaaagaccacatt
seqID:4   (1) --

SeqID:43   (181) ggcacccgcaatcctaataacaatgctgccaccgtgctacaacttcctcaaggaacaaca
seqID:4   (1) --

SeqID:43   (241) ttgccaaaaggcttctacgcagagggaagcagaggcggcagtcaagcctcttctcgctcc
seqID:4   (1) --

SeqID:43   (301) tcatcacgtagtcgcggtaattcaagaaattcaactcctggcagcagtaggggaaattct
seqID:4   (1) --

SeqID:43   (361) cctgctcgaatggctagcggaggtggtgaaactgccctcgcgctattgctgctagacaga
seqID:4   (1) --

SeqID:43   (421) ttgaaccagcttgagagcaaagtttctggtaaaggccaacaacaacaaggccaaactgtc
seqID:4   (1) --

SeqID:43   (481) actaagaaatctgctgctgaggcatctaaaaagcctcgccaaaaacgtactgccacaaaa
seqID:4   (1) --

SeqID:43   (541) cagtacaacgtcactcaagcatttgggagacgtggtccagaacaaacccaaggaaatttc
seqID:4   (1) --

SeqID:43   (601) ggggaccaagacctaatcagacaaggaactgattacaaacattggccgcaaattgcacaa
seqID:4   (1) --

```
SeqID:43    (  661)  tttgctccaagtgcctctgcattctttggaatgtcacgcattggcatggaagtcacacct
seqID:4     (    1)  ------------------------------------------------------------


SeqID:43    (  721)  tcgggaacatggctgacttatcatggagccattaaattggatgacaaagatccacaattc
seqID:4     (    1)  ------------------------------------------------------------


SeqID:43    (  781)  aaagacaacgtcatactgctgaacaagcacattgacgcatacaaaacattcccaccaaca
seqID:4     (    1)  ------------------------------------------------------------


SeqID:43    (  841)  gagcctaaaaaggacaaaaagaaaaagactgatgaagctcagcctttgccgcagagacaa
seqID:4     (    1)  ------------------------------------------------------------


SeqID:43    (  901)  aagaagcagcccactgtgactcttcttcctgcggctgacatggatgatttctccagacaa
seqID:4     (    1)  ------------------------------------------------------------


SeqID:43    (  961)  cttcaaaattccatgagtggagcttctgctgattcaactcaggcataaacactcatgatg
seqID:4     (    1)  ------------------------------------------------------------


                     ++++++++++++++++++++
SeqID:43    ( 1021)  accaCACAAGGCAGATGGGCTATGTaaacgttttcgcaattccgtttacgatacatagtc
seqID:4     (    1)  ----CACAAGGCAGATGGGCTATGT------------------------------------


SeqID:43    ( 1081)  tactcttgtgcagaatgaattctcgtaactaaacagcacaagtaggtttagttaacttta
seqID:4     (   22)  ------------------------------------------------------------


SeqID:43    ( 1141)  atctcacatagcaatctttaatcaatgtgtaacattagggaggacttgaaagagccacca
seqID:4     (   22)  ------------------------------------------------------------


SeqID:43    ( 1201)  cattttcatcgaggccacgcggagtacgatcgagggtacagtgaataatgctagggagag
seqID:4     (   22)  ------------------------------------------------------------


SeqID:43    ( 1261)  ctgcctatatggaagagccctaatgtgtaaaattaattttagtagtgctatccccatgtg
seqID:4     (   22)  ------------------------------------------------------------


SeqID:43    ( 1321)  attttaatagcttcttaggagaatgac
seqID:4     (   22)  ---------------------------
```

2

Alignment of SEQ ID NO:43 and SEQ ID NO:6


```
SeqID:43   (     1)  taccgaagagctacccgacgagttcgtggtggtgacggcaaaatgaaagagctcagcccc
seqID:6    (     1)  ------------------------------------------------------------


SeqID:43   (    61)  agatggtacttctattacctaggaactggcccagaagcttcacttcctacggcgctaac
seqID:6    (     1)  ------------------------------------------------------------


SeqID:43   (   121)  aaagaaggcatcgtatgggttgcaactgagggagccttgaatacacccaaagaccacatt
seqID:6    (     1)  ------------------------------------------------------------


SeqID:43   (   181)  ggcacccgcaatcctaataacaatgctgccaccgtgctacaacttcctcaaggaacaaca
seqID:6    (     1)  ------------------------------------------------------------


SeqID:43   (   241)  ttgccaaaaggcttctacgcagagggaagcagaggcggcagtcaagcctcttctcgctcc
seqID:6    (     1)  ------------------------------------------------------------


SeqID:43   (   301)  tcatcacgtagtcgcggtaattcaagaaattcaactcctggcagcagtaggggaaattct
seqID:6    (     1)  ------------------------------------------------------------


SeqID:43   (   361)  cctgctcgaatggctagcggaggtggtgaaactgccctcgcgctattgctgctagacaga
seqID:6    (     1)  ------------------------------------------------------------


SeqID:43   (   421)  ttgaaccagcttgagagcaaagtttctggtaaaggccaacaacaacaaggccaaactgtc
seqID:6    (     1)  ------------------------------------------------------------


SeqID:43   (   481)  actaagaaatctgctgctgaggcatctaaaaagcctcgccaaaaacgtactgccacaaaa
seqID:6    (     1)  ------------------------------------------------------------


SeqID:43   (   541)  cagtacaacgtcactcaagcatttgggagacgtggtccagaacaaacccaaggaaatttc
seqID:6    (     1)  ------------------------------------------------------------


SeqID:43   (   601)  ggggaccaagacctaatcagacaaggaactgattacaaacattggccgcaaattgcacaa
seqID:6    (     1)  ------------------------------------------------------------
```

```
SeqID:43    (   661)  tttgctccaagtgcctctgcattctttggaatgtcacgcattggcatggaagtcacacct
seqID:6     (     1)  ------------------------------------------------------------


SeqID:43    (   721)  tcgggaacatggctgacttatcatggagccattaaattggatgacaaagatccacaattc
seqID:6     (     1)  ------------------------------------------------------------


SeqID:43    (   781)  aaagacaacgtcatactgctgaacaagcacattgacgcatacaaaacattcccaccaaca
seqID:6     (     1)  ------------------------------------------------------------


SeqID:43    (   841)  gagcctaaaaaggacaaaaagaaaaagactgatgaagctcagcctttgccgcagagacaa
seqID:6     (     1)  ------------------------------------------------------------


SeqID:43    (   901)  aagaagcagcccactgtgactcttcttcctgcggctgacatggatgatttctccagacaa
seqID:6     (     1)  ------------------------------------------------------------


SeqID:43    (   961)  cttcaaaattccatgagtggagcttctgctgattcaactcaggcataaacactcatgatg
seqID:6     (     1)  ------------------------------------------------------------


SeqID:43    (  1021)  accacacaaggcagatgggctatgtaaacgttttcgcaattccgtttacgatacatagtc
seqID:6     (     1)  ------------------------------------------------------------


SeqID:43    (  1081)  tactcttgtgcagaatgaattctcgtaactaaacagcacaagtaggtttagttaacttta
seqID:6     (     1)  ------------------------------------------------------------


SeqID:43    (  1141)  atctcacatagcaatctttaatcaatgtgtaacattagggaggacttgaaagagccacca
seqID:6     (     1)  ------------------------------------------------------------


                      ++++++++++++++++++++++++
SeqID:43    (  1201)  catTTTCATCGAGGCCACGCGGAGTACgatcgagggtacagtgaataatgctagggagag
seqID:6     (     1)  ---TTTCATCGAGGCCACGCGGAGTAC----------------------------------


SeqID:43    (  1261)  ctgcctatatggaagagccctaatgtgtaaaattaattttagtagtgctatccccatgtg
seqID:6     (    25)  ------------------------------------------------------------


SeqID:43    (  1321)  attttaatagcttcttaggagaatgac
seqID:6     (    25)  ---------------------------
```

Alignment of SEQ ID NO:43 and SEQ ID NO:8


```
SeqID:43    (     1)  taccgaagagctacccgacgagttcgtggtggtgacggcaaaatgaaagagctcagcccc
seqID:8     (     1)  ------------------------------------------------------------


SeqID:43    (    61)  agatggtacttctattacctaggaactggcccagaagcttcacttccctacggcgctaac
seqID:8     (     1)  ------------------------------------------------------------


SeqID:43    (   121)  aaagaaggcatcgtatgggttgcaactgagggagccttgaatacacccaaagaccacatt
seqID:8     (     1)  ------------------------------------------------------------


SeqID:43    (   181)  ggcacccgcaatcctaataacaatgctgccaccgtgctacaacttcctcaaggaacaaca
seqID:8     (     1)  ------------------------------------------------------------


SeqID:43    (   241)  ttgccaaaaggcttctacgcagagggaagcagaggcggcagtcaagcctcttctcgctcc
seqID:8     (     1)  ------------------------------------------------------------


SeqID:43    (   301)  tcatcacgtagtcgcggtaattcaagaaattcaactcctggcagcagtaggggaaattct
seqID:8     (     1)  ------------------------------------------------------------


SeqID:43    (   361)  cctgctcgaatggctagcggaggtggtgaaactgccctcgcgctattgctgctagacaga
seqID:8     (     1)  ------------------------------------------------------------


SeqID:43    (   421)  ttgaaccagcttgagagcaaagtttctggtaaaggccaacaacaacaaggccaaactgtc
seqID:8     (     1)  ------------------------------------------------------------


SeqID:43    (   481)  actaagaaatctgctgctgaggcatctaaaaagcctcgccaaaaacgtactgccacaaaa
seqID:8     (     1)  ------------------------------------------------------------


SeqID:43    (   541)  cagtacaacgtcactcaagcatttgggagacgtggtccagaacaaacccaaggaaatttc
seqID:8     (     1)  ------------------------------------------------------------


SeqID:43    (   601)  ggggaccaagacctaatcagacaaggaactgattacaaacattggccgcaaattgcacaa
seqID:8     (     1)  ------------------------------------------------------------
```

```
SeqID:43     (    661)  tttgctccaagtgcctctgcattctttggaatgtcacgcattggcatggaagtcacacct
seqID:8      (      1)  ------------------------------------------------------------


SeqID:43     (    721)  tcgggaacatggctgacttatcatggagccattaaattggatgacaaagatccacaattc
seqID:8      (      1)  ------------------------------------------------------------


SeqID:43     (    781)  aaagacaacgtcatactgctgaacaagcacattgacgcatacaaaacattcccaccaaca
seqID:8      (      1)  ------------------------------------------------------------


SeqID:43     (    841)  gagcctaaaaaggacaaaaagaaaaagactgatgaagctcagcctttgccgcagagacaa
seqID:8      (      1)  ------------------------------------------------------------


SeqID:43     (    901)  aagaagcagcccactgtgactcttcttcctgcggctgacatggatgatttctccagacaa
seqID:8      (      1)  ------------------------------------------------------------


SeqID:43     (    961)  cttcaaaattccatgagtggagcttctgctgattcaactcaggcataaacactcatgatg
seqID:8      (      1)  ------------------------------------------------------------


                                           +++++++++++++++++++
SeqID:43     (   1021)  accacacaaggcagatgggctatgtAAACGTTTTCGCAATTCCGTttacgatacatagtc
seqID:8      (      1)  ------------------------AAACGTTTTCGCAATTCCGT--------------


SeqID:43     (   1081)  tactcttgtgcagaatgaattctcgtaactaaacagcacaagtaggtttagttaacttta
seqID:8      (     21)  ------------------------------------------------------------


SeqID:43     (   1141)  atctcacatagcaatctttaatcaatgtgtaacattagggaggacttgaaagagccacca
seqID:8      (     21)  ------------------------------------------------------------


SeqID:43     (   1201)  cattttcatcgaggccacgcggagtacgatcgagggtacagtgaataatgctagggagag
seqID:8      (     21)  ------------------------------------------------------------


SeqID:43     (   1261)  ctgcctatatggaagagccctaatgtgtaaaattaattttagtagtgctatccccatgtg
seqID:8      (     21)  ------------------------------------------------------------


SeqID:43     (   1321)  attttaatagcttcttaggagaatgac
seqID:8      (     21)  ---------------------------
```

Alignment of SEQ ID NO:43 and SEQ ID NO:11

```
SeqID:43   (     1) taccgaagagctacccgacgagttcgtggtggtgacggcaaaatgaaagagctcagcccc
seqID:11   (     1) ------------------------------------------------------------


                     +++++++++++++++++++
SeqID:43   (   121) aaagaAGGCATCGTATGGGTTGCAactgagggagccttgaatacacccaaagaccacatt
seqID:11   (     1) -----AGGCATCGTATGGGTTGCA------------------------------------


SeqID:43   (   181) ggcacccgcaatcctaataacaatgctgccaccgtgctacaacttcctcaaggaacaaca
seqID:11   (    20) ------------------------------------------------------------


SeqID:43   (   241) ttgccaaaaggcttctacgcagagggaagcagaggcggcagtcaagcctcttctcgctcc
seqID:11   (    20) ------------------------------------------------------------


SeqID:43   (   301) tcatcacgtagtcgcggtaattcaagaaattcaactcctggcagcagtaggggaaattct
seqID:11   (    20) ------------------------------------------------------------


SeqID:43   (   361) cctgctcgaatggctagcggaggtggtgaaactgccctcgcgctattgctgctagacaga
seqID:11   (    20) ------------------------------------------------------------


SeqID:43   (   421) ttgaaccagcttgagagcaaagtttctggtaaaggccaacaacaacaaggccaaactgtc
seqID:11   (    20) ------------------------------------------------------------


SeqID:43   (   481) actaagaaatctgctgctgaggcatctaaaaagcctcgccaaaaacgtactgccacaaaa
seqID:11   (    20) ------------------------------------------------------------


SeqID:43   (   541) cagtacaacgtcactcaagcatttgggagacgtggtccagaacaaacccaaggaaatttc
seqID:11   (    20) ------------------------------------------------------------


SeqID:43   (   601) ggggaccaagacctaatcagacaaggaactgattacaaacattggccgcaaattgcacaa
seqID:11   (    20) ------------------------------------------------------------
```

```
SeqID:43       (   661)  tttgctccaagtgcctctgcattctttggaatgtcacgcattggcatggaagtcacacct
seqID:11       (    20)  ------------------------------------------------------------


SeqID:43       (   721)  tcgggaacatggctgacttatcatggagccattaaattggatgacaaagatccacaattc
seqID:11       (    20)  ------------------------------------------------------------


SeqID:43       (   781)  aaagacaacgtcatactgctgaacaagcacattgacgcatacaaaacattcccaccaaca
seqID:11       (    20)  ------------------------------------------------------------


SeqID:43       (   841)  gagcctaaaaaggacaaaaagaaaaagactgatgaagctcagcctttgccgcagagacaa
seqID:11       (    20)  ------------------------------------------------------------


SeqID:43       (   901)  aagaagcagcccactgtgactcttcttcctgcggctgacatggatgatttctccagacaa
seqID:11       (    20)  ------------------------------------------------------------


SeqID:43       (   961)  cttcaaaattccatgagtggagcttctgctgattcaactcaggcataaacactcatgatg
seqID:11       (    20)  ------------------------------------------------------------


SeqID:43       (  1021)  accacacaaggcagatgggctatgtaaacgttttcgcaattccgtttacgatacatagtc
seqID:11       (    20)  ------------------------------------------------------------


SeqID:43       (  1081)  tactcttgtgcagaatgaattctcgtaactaaacagcacaagtaggtttagttaacttta
seqID:11       (    20)  ------------------------------------------------------------


SeqID:43       (  1141)  atctcacatagcaatctttaatcaatgtgtaacattagggaggacttgaaagagccacca
seqID:11       (    20)  ------------------------------------------------------------


SeqID:43       (  1201)  cattttcatcgaggccacgcggagtacgatcgagggtacagtgaataatgctagggagag
seqID:11       (    20)  ------------------------------------------------------------


SeqID:43       (  1261)  ctgcctatatggaagagccctaatgtgtaaaattaattttagtagtgctatccccatgtg
seqID:11       (    20)  ------------------------------------------------------------


SeqID:43       (  1321)  attttaatagcttcttaggagaatgac
seqID:11       (    20)  ---------------------------
```

Alignment of SEQ ID NO:43 and SEQ ID NO:13

```
SeqID:43    (      1)  taccgaagagctacccgacgagttcgtggtggtgacggcaaaatgaaagagctcagcccc
seqID:13    (      1)  ------------------------------------------------------------


SeqID:43    (     61)  agatggtacttctattacctaggaactggcccagaagcttcacttccctacggcgctaac
seqID:13    (      1)  ------------------------------------------------------------


                                                +++++++++++++++++++++++++++++
SeqID:43    (    121)  aaagaaggcatcgtatgggttgcaactgAGGGAGCCTTGAATACACCCAAAGACCAcatt
seqID:13    (      1)  ----------------------------AGGGAGCCTTGAATACACCCAAAGACCA----


SeqID:43    (    181)  ggcacccgcaatcctaataacaatgctgccaccgtgctacaacttcctcaaggaacaaca
seqID:13    (     29)  ------------------------------------------------------------


SeqID:43    (    241)  ttgccaaaaggcttctacgcagagggaagcagaggcggcagtcaagcctcttctcgctcc
seqID:13    (     29)  ------------------------------------------------------------


SeqID:43    (    301)  tcatcacgtagtcgcggtaattcaagaaattcaactcctggcagcagtaggggaaattct
seqID:13    (     29)  ------------------------------------------------------------


SeqID:43    (    361)  cctgctcgaatggctagcggaggtggtgaaactgccctcgcgctattgctgctagacaga
seqID:13    (     29)  ------------------------------------------------------------


SeqID:43    (    421)  ttgaaccagcttgagagcaaagtttctggtaaaggccaacaacaacaaggccaaactgtc
seqID:13    (     29)  ------------------------------------------------------------


SeqID:43    (    481)  actaagaaatctgctgctgaggcatctaaaaagcctcgccaaaaacgtactgccacaaaa
seqID:13    (     29)  ------------------------------------------------------------


SeqID:43    (    541)  cagtacaacgtcactcaagcatttgggagacgtggtccagaacaaacccaaggaaatttc
seqID:13    (     29)  ------------------------------------------------------------


SeqID:43    (    601)  ggggaccaagacctaatcagacaaggaactgattacaaacattggccgcaaattgcacaa
seqID:13    (     29)  ------------------------------------------------------------
```

```
SeqID:43    (    661)  tttgctccaagtgcctctgcattctttggaatgtcacgcattggcatggaagtcacacct
seqID:13    (     29)  ------------------------------------------------------------

SeqID:43    (    721)  tcgggaacatggctgacttatcatggagccattaaattggatgacaaagatccacaattc
seqID:13    (     29)  ------------------------------------------------------------

SeqID:43    (    781)  aaagacaacgtcatactgctgaacaagcacattgacgcatacaaaacattcccaccaaca
seqID:13    (     29)  ------------------------------------------------------------

SeqID:43    (    841)  gagcctaaaaaggacaaaaagaaaaagactgatgaagctcagcctttgccgcagagacaa
seqID:13    (     29)  ------------------------------------------------------------

SeqID:43    (    901)  aagaagcagcccactgtgactcttcttcctgcggctgacatggatgatttctccagacaa
seqID:13    (     29)  ------------------------------------------------------------

SeqID:43    (    961)  cttcaaaattccatgagtggagcttctgctgattcaactcaggcataaacactcatgatg
seqID:13    (     29)  ------------------------------------------------------------

SeqID:43    (   1021)  accacacaaggcagatgggctatgtaaacgttttcgcaattccgtttacgatacatagtc
seqID:13    (     29)  ------------------------------------------------------------

SeqID:43    (   1081)  tactcttgtgcagaatgaattctcgtaactaaacagcacaagtaggtttagttaacttta
seqID:13    (     29)  ------------------------------------------------------------

SeqID:43    (   1141)  atctcacatagcaatctttaatcaatgtgtaacattagggaggacttgaaagagccacca
seqID:13    (     29)  ------------------------------------------------------------

SeqID:43    (   1201)  cattttcatcgaggccacgcggagtacgatcgagggtacagtgaataatgctagggagag
seqID:13    (     29)  ------------------------------------------------------------

SeqID:43    (   1261)  ctgcctatatggaagagccctaatgtgtaaaattaattttagtagtgctatccccatgtg
seqID:13    (     29)  ------------------------------------------------------------

SeqID:43    (   1321)  attttaatagcttcttaggagaatgac
seqID:13    (     29)  ---------------------------
```

2

Alignment of SEQ ID NO:43 and SEQ ID NO:14

SeqID:43   (1) taccgaagagctacccgacgagttcgtggtggtgacggcaaaatgaaagagctcagcccc
seqID:14   (1) --

SeqID:43   (61) agatggtacttctattacctaggaactggcccagaagcttcacttccctacggcgctaac
seqID:14   (1) --

SeqID:43   (121) aaagaaggcatcgtatgggttgcaactgagggagccttgaatacacccaaagaccacatt
seqID:14   (1) --

SeqID:43   (181) ggcacccgcaatcctaataacaatgctgccaccgtgctacaacttcctcaaggaacaaca
seqID:14   (1) --

SeqID:43   (241) ttgccaaaaggcttctacgcagagggaagcagaggcggcagtcaagcctcttctcgctcc
seqID:14   (1) --

SeqID:43   (301) tcatcacgtagtcgcggtaattcaagaaattcaactcctggcagcagtaggggaaattct
seqID:14   (1) --

SeqID:43   (361) cctgctcgaatggctagcggaggtggtgaaactgccctcgcgctattgctgctagacaga
seqID:14   (1) --

SeqID:43   (421) ttgaaccagcttgagagcaaagtttctggtaaaggccaacaacaacaaggccaaactgtc
seqID:14   (1) --

                                                      ++++++++++++++++++++
SeqID:43   (481) actaagaaatctgctgctgaggcatctaaaAAGCCTCGCCAAAAACGTACtgccacaaaa
seqID:14   (1) ---------------------------AAGCCTCGCCAAAAACGTAC----------

SeqID:43   (541) cagtacaacgtcactcaagcatttgggagacgtggtccagaacaaacccaaggaaatttc
seqID:14   (21) --

SeqID:43   (601) ggggaccaagacctaatcagacaaggaactgattacaaacattggccgcaaattgcacaa
seqID:14   (21) --

1

```
SeqID:43      (    661)  tttgctccaagtgcctctgcattctttggaatgtcacgcattggcatggaagtcacacct
seqID:14      (     21)  ------------------------------------------------------------

SeqID:43      (    721)  tcgggaacatggctgacttatcatggagccattaaattggatgacaaagatccacaattc
seqID:14      (     21)  ------------------------------------------------------------

SeqID:43      (    781)  aaagacaacgtcatactgctgaacaagcacattgacgcatacaaaacattcccaccaaca
seqID:14      (     21)  ------------------------------------------------------------

SeqID:43      (    841)  gagcctaaaaaggacaaaaagaaaaagactgatgaagctcagcctttgccgcagagacaa
seqID:14      (     21)  ------------------------------------------------------------

SeqID:43      (    901)  aagaagcagcccactgtgactcttcttcctgcggctgacatggatgatttctccagacaa
seqID:14      (     21)  ------------------------------------------------------------

SeqID:43      (    961)  cttcaaaattccatgagtggagcttctgctgattcaactcaggcataaacactcatgatg
seqID:14      (     21)  ------------------------------------------------------------

SeqID:43      (   1021)  accacacaaggcagatgggctatgtaaacgttttcgcaattccgtttacgatacatagtc
seqID:14      (     21)  ------------------------------------------------------------

SeqID:43      (   1081)  tactcttgtgcagaatgaattctcgtaactaaacagcacaagtaggtttagttaactttta
seqID:14      (     21)  ------------------------------------------------------------

SeqID:43      (   1141)  atctcacatagcaatctttaatcaatgtgtaacattagggaggacttgaaagagccacca
seqID:14      (     21)  ------------------------------------------------------------

SeqID:43      (   1201)  cattttcatcgaggccacgcggagtacgatcgagggtacagtgaataatgctagggagag
seqID:14      (     21)  ------------------------------------------------------------

SeqID:43      (   1261)  ctgcctatatggaagagccctaatgtgtaaaattaattttagtagtgctatccccatgtg
seqID:14      (     21)  ------------------------------------------------------------

SeqID:43      (   1321)  attttaatagcttcttaggagaatgac
seqID:14      (     21)  ---------------------------
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Alignment of SEQ ID NO:43 and SEQ ID NO:16

SeqID:43   (1) taccgaagagctacccgacgagttcgtggtggtgacggcaaaatgaaagagctcagcccc
seqID:16   (1) --

SeqID:43   (61) agatggtacttctattacctaggaactggcccagaagcttcacttccctacggcgctaac
seqID:16   (1) --

SeqID:43   (121) aaagaaggcatcgtatgggttgcaactgagggagccttgaatacacccaaagaccacatt
seqID:16   (1) --

SeqID:43   (181) ggcacccgcaatcctaataacaatgctgccaccgtgctacaacttcctcaaggaacaaca
seqID:16   (1) --

SeqID:43   (241) ttgccaaaaggcttctacgcagagggaagcagaggcggcagtcaagcctcttctcgctcc
seqID:16   (1) --

SeqID:43   (301) tcatcacgtagtcgcggtaattcaagaaattcaactcctggcagcagtaggggaaattct
seqID:16   (1) --

SeqID:43   (361) cctgctcgaatggctagcggaggtggtgaaactgccctcgcgctattgctgctagacaga
seqID:16   (1) --

SeqID:43   (421) ttgaaccagcttgagagcaaagtttctggtaaaggccaacaacaacaaggccaaactgtc
seqID:16   (1) --

SeqID:43   (481) actaagaaatctgctgctgaggcatctaaaaagcctcgccaaaaacgtactgccacaaaa
seqID:16   (1) --

SeqID:43   (541) cagtacaacgtcactcaagcatttgggagacgtggtccagaacaaacccaaggaaatttc
seqID:16   (1) --

SeqID:43   (601) ggggaccaagacctaatcagacaaggaactgattacaaacattggccgcaaattgcacaa
seqID:16   (1) --

```
                                                     ++++++++++++++++++++++++++
SeqID:43    (   661)  tttgctccaagtgcctctgcattctttggaatgTCACGCATTGGCATGGAAGTCACACct
seqID:16    (     1)  ---------------------------------TCACGCATTGGCATGGAAGTCACAC--


SeqID:43    (   721)  tcgggaacatggctgacttatcatggagccattaaattggatgacaaagatccacaattc
seqID:16    (    26)  ------------------------------------------------------------


SeqID:43    (   781)  aaagacaacgtcatactgctgaacaagcacattgacgcatacaaaacattcccaccaaca
seqID:16    (    26)  ------------------------------------------------------------


SeqID:43    (   841)  gagcctaaaaaggacaaaaagaaaaagactgatgaagctcagcctttgccgcagagacaa
seqID:16    (    26)  ------------------------------------------------------------


SeqID:43    (   901)  aagaagcagcccactgtgactcttcttcctgcggctgacatggatgatttctccagacaa
seqID:16    (    26)  ------------------------------------------------------------


SeqID:43    (   961)  cttcaaaattccatgagtggagcttctgctgattcaactcaggcataaacactcatgatg
seqID:16    (    26)  ------------------------------------------------------------


SeqID:43    (  1021)  accacacaaggcagatgggctatgtaaacgttttcgcaattccgtttacgatacatagtc
seqID:16    (    26)  ------------------------------------------------------------


SeqID:43    (  1081)  tactcttgtgcagaatgaattctcgtaactaaacagcacaagtaggtttagttaacttta
seqID:16    (    26)  ------------------------------------------------------------


SeqID:43    (  1141)  atctcacatagcaatctttaatcaatgtgtaacattagggaggacttgaaagagccacca
seqID:16    (    26)  ------------------------------------------------------------


SeqID:43    (  1201)  cattttcatcgaggccacgcggagtacgatcgagggtacagtgaataatgctagggagag
seqID:16    (    26)  ------------------------------------------------------------


SeqID:43    (  1261)  ctgcctatatggaagagccctaatgtgtaaaattaattttagtagtgctatccccatgtg
seqID:16    (    26)  ------------------------------------------------------------


SeqID:43    (  1321)  attttaatagcttcttaggagaatgac
seqID:16    (    26)  ---------------------------
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